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## LIST OF SYMBOLS

$\ddot{u}$	Acceleration with respect to time
$u$	Displacement, initial displacement $u(0)$
$m$	Mass of the structure
$k$	Stiffness of the structure
$p(t)$	External force varies with time
$f_D$	External force of the damper equal and opposite with the internal force in the damper
$c$	Viscous damping coefficient
$\dot{u}$	Velocity varies with time
$f_S$	External force equal and opposite to the internal force resisting the displacement, $u$
$k$	Lateral stiffness of the system
$u$	Displacement varies with time
$u_g$	Displacement of the ground
$u^t(t)$	The total (or absolute) displacement of the mass
$u(t)$	The relative displacement between the mass and ground
$\omega_n$	Natural circular frequency
$T_n$	Natural period of vibration
$f_n$	Natural cyclic frequency of vibration
$f_{rf}$	Flexural Strength of concrete
$f_{rs}$	Shear Strength of concrete
$E$	Modulus of Elasticity
$f_{cu}$	Concrete Compression Strength